



SEQUENCE LISTING

<110> HAYNES, BARTON F.
LIAO, HUA-XIN

<120> SEVERE ACUTE RESIRATORY SYNDROME

<130> 1579-1045

<140> 10/553,844
<141> 2004-05-10

<150> PCT/US04/014512
<151> 2004-05-10

<150> 60/468,644
<151> 2003-05-08

<160> 39

<170> PatentIn Ver. 3.3

<210> 1
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 1
Thr Thr Phe Asp Asp Val Gln Ala Pro Asn Tyr Thr Gln His Thr Ser
1 5 10 15

Ser Met Arg Gly Val Tyr Tyr Pro Asp Glu Ile Phe Arg Ser Asp Thr
20 25 30

<210> 2
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 2
Phe Lys Asp Gly Ile Tyr Phe Ala Ala Thr Glu Lys Ser Asn Val Val
1 5 10 15

Arg Gly Trp Val Phe Gly Ser Thr Met Asn Asn Lys Ser Gln Ser
20 25 30

<210> 3
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 3
Asn Ser Thr Asn Val Val Ile Arg Ala Cys Asn Phe Glu Leu Cys Asp
1 5 10 15
Asn Pro Phe Phe Ala Val Ser Lys Pro Met Gly Thr Gln Thr His
20 25 30

<210> 4
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 4
Phe Glu Tyr Ile Ser Asp Ala Phe Ser Leu Asp Val Ser Glu Lys Ser
1 5 10 15
Gly Asn Phe Lys His Leu Arg Glu Phe Val Phe Lys
20 25

<210> 5
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 5
Asp Val Ser Glu Lys Ser Gly Asn Phe Lys His Leu Arg Glu Phe Val
1 5 10 15
Phe Lys Asn Lys Asp Gly Phe Leu Tyr Val Tyr Lys Gly Tyr Gln Pro
20 25 30
Ile Asp Val Val Arg Asp Leu Pro Ser Gly
35 40

<210> 6
<211> 24

<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 6

Lys Gly Tyr Gln Pro Ile Asp Val Val Arg Asp Leu Pro Ser Gly Phe
1 5 10 15

Asn Thr Leu Lys Pro Ile Phe Lys
20

<210> 7

<211> 36

<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 7

Phe Ser Pro Ala Gln Asp Ile Trp Gly Thr Ser Ala Ala Ala Tyr Phe
1 5 10 15

Val Gly Tyr Leu Lys Pro Thr Thr Phe Met Leu Lys Tyr Asp Glu Asn
20 25 30

Gly Thr Ile Thr
35

<210> 8

<211> 23

<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 8

Lys Tyr Asp Glu Asn Gly Thr Ile Thr Asp Ala Val Asp Cys Ser Gln
1 5 10 15

Asn Pro Leu Ala Glu Leu Lys
20

<210> 9

<211> 36

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 9
Phe Ser Pro Ala Gln Asp Ile Trp Gly Thr Ser Ala Ala Ala Tyr Phe
1 5 10 15

Val Gly Tyr Leu Lys Pro Thr Thr Phe Met Leu Lys Tyr Asp Glu Asn
20 25 30

Gly Thr Ile Thr
35

<210> 10
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 10
Phe Val Val Lys Gly Asp Asp Val Arg Gln Ile Ala Pro Gly Gln Thr
1 5 10 15

Gly Val Ile Ala Asp Tyr Asn Tyr Lys Leu Pro Asp Asp Phe Met
20 25 30

<210> 11
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 11
Asn Thr Arg Asn Ile Asp Ala Thr Ser Thr Gly Asn Tyr Asn Tyr Lys
1 5 10 15

Tyr Arg Tyr Leu Arg His Gly Lys Leu Arg Pro Phe Glu Arg Asp Ile
20 25 30

Ser Asn

<210> 12
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 12
Phe Ser Pro Asp Gly Lys Pro Cys Thr Pro Pro Ala Leu Asn Cys Tyr
1 5 10 15

Trp Pro Leu Asn Asp Tyr Gly Phe Tyr Thr Thr Gly Ile Gly
20 25 30

<210> 13
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 13
Pro Lys Leu Ser Thr Asp Leu Ile Lys Asn Gln Cys Val Asn Phe Asn
1 5 10 15

Phe Asn Gly Leu Thr Gly Thr Val Leu Thr Pro Ser Ser Lys Arg
20 25 30

Phe Gln

<210> 14
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 14
Thr Pro Ser Ser Lys Arg Phe Gln Pro Phe Gln Gln Phe Gly Arg Asp
1 5 10 15

Val Ser Asp Phe Thr Asp Ser Val Arg Asp Pro Lys Thr Ser Glu
20 25 30

<210> 15
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 15
Thr Asn Ala Ser Ser Glu Val Ala Val Leu Tyr Gln Asp Val Asn Cys
1 5 10 15
Thr Asp Val Ser Thr Ala Ile His Ala Asp Gln Leu Thr Pro Ala Trp
20 25 30
Arg Ile Tyr Ser Thr Gly Asn
35

<210> 16
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 16
Glu His Val Asp Thr Ser Tyr Glu Cys Asp Ile Pro Ile Gly Ala Gly
1 5 10 15
Ile Cys Ala Ser Tyr His Thr Val Ser Leu Leu Arg Ser Thr Ser Gln
20 25 30
Lys Ser Ile
35

<210> 17
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
peptide

<400> 17
Glu His Val Asp Thr Ser Tyr Glu Cys Asp Ile Pro Ile Gly Ala Gly
1 5 10 15
Ile Cys Ala Ser Tyr His Thr Val Ser Leu Leu Arg Ser Thr Ser Gln
20 25 30
Lys Ser Ile
35

<210> 18
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 18
Leu Lys Pro Thr Lys Arg Ser Phe Ile Glu Asp Leu Leu Phe Asn Lys
1 5 10 15

Val Thr Leu Ala Asp Ala Gly Phe Met Lys Gln Tyr Gly Glu Cys Leu
20 25 30

Gly Asp Ile Asn Ala Arg Asp Leu
35 40

<210> 19
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 19
Asn Gln Lys Gln Ile Ala Asn Gln Phe Asn Lys Ala Ile Ser Gln Ile
1 5 10 15

Gln Glu Ser Leu Thr Thr Ser Thr Ala Leu Gly Lys Leu Gln Asp
20 25 30

Val Val Asn Gln Asn Ala Gln
35

<210> 20
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 20
Ser Lys Arg Val Asp Phe Cys Gly Lys Gly Tyr His Leu Met Ser Phe
1 5 10 15

Pro Gln Ala Ala Pro His Gly Val Val Phe Leu His Val Thr Tyr Val
20 25 30

Pro Ser Gln Glu Arg Asn Phe
35

<210> 21
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 21
Glu Gly Lys Ala Tyr Phe Pro Arg Glu Gly Val Phe Val Phe Asn Gly
1 5 10 15

Thr Ser Trp Phe Ile Thr Gln Arg Asn Phe Phe Ser Pro
20 25

<210> 22
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 22
Asp Pro Leu Gln Pro Glu Leu Asp Ser Phe Lys Glu Glu Leu Asp Lys
1 5 10 15

Tyr Phe Lys Asn His Thr Ser Pro Asp Val Asp Leu Gly Asp Ile Ser
20 25 30

Gly

<210> 23
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 23
Gln Lys Glu Ile Asp Arg Leu Asn Glu Val Ala Lys Asn Leu Asn Glu
1 5 10 15

Ser Leu Ile Asp Leu Gln Glu Leu Gly Lys Tyr Glu Gln Tyr
20 25 30

<210> 24
<211> 41
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 24
Leu Thr Val Leu Pro Pro Leu Leu Thr Asp Asp Met Ile Ala Ala Tyr
1 5 10 15

Thr Ala Ala Leu Val Ser Gly Thr Ala Thr Ala Gly Trp Thr Phe Gly
20 25 30

Ala Gly Ala Ala Leu Gln Ile Pro Phe
35 40

<210> 25
<211> 40
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 25
Ala Met Gln Met Ala Tyr Arg Phe Asn Gly Ile Gly Val Thr Gln Asn
1 5 10 15

Val Leu Tyr Glu Asn Gln Lys Gln Ile Ala Asn Gln Phe Asn Lys Ala
20 25 30

Ile Ser Gln Ile Gln Glu Ser Leu
35 40

<210> 26
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 26
Glu Leu Asp Ser Phe Lys Glu Glu Leu Asp Lys Tyr Phe Lys Asn His
1 5 10 15

Thr Ser Pro Asp Val Asp Leu Gly Asp Ile Ser Gly Ile Asn Ala Ser
20 25 30

Val Val

<210> 27
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 27
Asn Ile Gln Lys Glu Ile Asp Arg Leu Asn Glu Val Ala Lys Asn Leu
1 5 10 15

Asn Glu Ser Leu Ile Asp Leu Gln Glu Leu Gly Lys Tyr Glu Gln Tyr
20 25 30

Ile Lys Trp Pro Trp
35

<210> 28
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 28
Asp Ser Thr Asp Asn Asn Gln Asn Gly Gly Arg Asn Gly Ala Arg Pro
1 5 10 15

Lys Gln Arg Arg Pro Gln Gly Leu Pro Asn Asn
20 25

<210> 29
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 29
Gly Ser Arg Gly Gly Ser Gln Ala Ser Ser Arg Ser Ser Arg Ser
1 5 10 15

Arg Gly Asn Ser Arg Asn Ser Thr Pro Gly Ser Ser Arg Gly Asn Ser
20 25 30

Pro Ala Arg
35

<210> 30
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 30
Lys Val Ser Gly Lys Gly Gln Gln Gln Gly Gln Thr Val Thr Lys
1 5 10 15

Lys Ser Ala Ala Glu Ala Ser Lys Lys Pro Arg Gln Lys Arg Thr Ala
20 25 30

Thr Lys

<210> 31
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 31
Gly Arg Arg Gly Pro Glu Gln Thr Gln Gly Asn Phe Gly Asp Gln Asp
1 5 10 15

Leu Ile Arg Gln Gly Thr Asp Tyr Lys His
20 25

<210> 32
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 32
His Ile Asp Ala Tyr Lys Thr Phe Pro Pro Thr Glu Pro Lys Lys Asp
1 5 10 15

Lys Lys Lys Lys Thr Asp Glu Ala Gln Pro Leu Pro Gln Arg Gln Lys
20 25 30

Lys Gln

<210> 33
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 33
 Gln Lys Lys Gln Pro Thr Val Thr Leu Leu Pro Ala Ala Asp Met Asp
 1 5 10 15

Asp Phe Ser Arg Gln Leu Gln Asn Ser Met Ser Gly Ala Ser Ala Asp
 20 25 30

Ser Thr Gln
 35

<210> 34
 <211> 81
 <212> PRT
 <213> SARS coronavirus

<400> 34
 Ala Met Gln Met Ala Tyr Arg Phe Asn Gly Ile Gly Val Thr Gln Asn
 1 5 10 15

Val Leu Tyr Glu Asn Gln Lys Gln Ile Ala Asn Gln Phe Asn Lys Ala
 20 25 30

Ile Ser Gln Ile Gln Glu Ser Leu Leu Thr Val Leu Pro Pro Leu Leu
 35 40 45

Thr Asp Asp Met Ile Ala Ala Tyr Thr Ala Ala Leu Val Ser Gly Thr
 50 55 60

Ala Thr Ala Gly Trp Thr Phe Gly Ala Gly Ala Ala Leu Gln Ile Pro
 65 70 75 80

Phe

<210> 35
 <211> 71
 <212> PRT
 <213> SARS coronavirus

<400> 35
 Glu Leu Asp Ser Phe Lys Glu Glu Leu Asp Lys Tyr Phe Lys Asn His
 1 5 10 15

Thr Ser Pro Asp Val Asp Leu Gly Asp Ile Ser Gly Ile Asn Ala Ser
 20 25 30

Val Val Asn Ile Gln Lys Glu Ile Asp Arg Leu Asn Glu Val Ala Lys
 35 40 45

Asn Leu Asn Glu Ser Leu Ile Asp Leu Gln Glu Leu Gly Lys Tyr Glu
 50 55 60

Gln Tyr Ile Lys Trp Pro Trp
 65 70

<210> 36

<211> 72

<212> PRT

<213> SARS coronavirus

<400> 36

Pro Glu Leu Asp Ser Phe Lys Glu Glu Leu Asp Lys Tyr Phe Lys Asn
 1 5 10 15

His Thr Ser Pro Asp Val Asp Leu Gly Asp Ile Ser Gly Ile Asn Ala
 20 25 30

Ser Val Val Asn Ile Gln Lys Glu Ile Asp Arg Leu Asn Glu Val Ala
 35 40 45

Lys Asn Leu Asn Glu Ser Leu Ile Asp Leu Gln Glu Leu Gly Lys Tyr
 50 55 60

Glu Gln Tyr Ile Lys Trp Pro Trp
 65 70

<210> 37

<211> 71

<212> PRT

<213> Human coronavirus

<400> 37

Pro Asn Leu Pro Asp Phe Lys Glu Glu Leu Asp Gln Trp Phe Lys Asn
 1 5 10 15

Gln Thr Leu Val Ala Pro Asp Leu Ser Leu Asp Tyr Ile Asn Val Thr
 20 25 30

Phe Leu Asp Leu Gln Asp Glu Met Asn Arg Leu Gln Glu Ala Ile Lys
 35 40 45

Val Leu Asn Gln Ser Tyr Ile Asn Leu Lys Asp Ile Gly Thr Tyr Glu
 50 55 60

Tyr Tyr Val Lys Trp Pro Trp
 65 70

<210> 38

<211> 71

<212> PRT

<213> Bovine coronavirus

<400> 38

Pro	Asn	Leu	His	Asp	Phe	Lys	Glu	Glu	Leu	Asp	Gln	Trp	Phe	Lys	Asn
1					5				10				15		

Gln	Thr	Ser	Val	Ala	Pro	Asp	Leu	Ser	Leu	Asp	Tyr	Ile	Asn	Val	Thr
					20				25				30		

Phe	Leu	Asp	Leu	Gln	Asp	Glu	Met	Asn	Arg	Leu	Gln	Glu	Ala	Ile	Lys
					35			40				45			

Val	Leu	Asn	Gln	Ser	Tyr	Ile	Asn	Leu	Lys	Asp	Ile	Gly	Thr	Tyr	Glu
					50			55				60			

Tyr	Tyr	Val	Lys	Trp	Pro	Trp
		65			70	

<210> 39

<211> 73

<212> PRT

<213> Mouse hepatitis virus

<400> 39

Pro	Asn	Leu	Pro	Asp	Phe	Lys	Glu	Glu	Leu	Asp	Lys	Trp	Phe	Lys	Asn
1					5				10				15		

Gln	Thr	Ser	Ile	Ala	Pro	Asp	Leu	Ser	Leu	Asp	Phe	Glu	Lys	Leu	Asn
					20				25				30		

Val	Thr	Phe	Leu	Asp	Leu	Thr	Tyr	Glu	Met	Asn	Arg	Ile	Gln	Asp	Ala
					35			40				45			

Ile	Lys	Lys	Leu	Asn	Glu	Ser	Tyr	Ile	Asn	Leu	Lys	Glu	Val	Gly	Thr
					50			55				60			

Tyr	Glu	Met	Tyr	Val	Lys	Trp	Pro	Trp
		65			70			